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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-3189
Plant ID No.:	103-00071
Applicant:	Williams Ohio Valley Midstream LLC (Williams)
Facility Name:	Blackshere Dehydration Station
Location:	Smithfield, Wetzel County
SIC Code:	1389
NAICS Code:	213112
Application Type:	Construction
Received Date:	May 6, 2014
Engineer Assigned:	Jerry Williams, P.E.
Fee Amount:	\$4,500
Date Received:	May 6, 2014
Complete Date:	June 17, 2014
Due Date:	September 15, 2014
Applicant Ad Date:	May 5, 2014
Newspaper:	<i>Moundsville Daily Echo</i>
UTM's:	Easting: 534.873 km Northing: 4,369.962 km Zone: 17
Description:	Installation and operation of a new natural gas dehydration station.

PROJECT OVERVIEW

Williams is proposing to construct and operate the Blackshere Dehydration Station. The facility will receive natural gas from local production wells then dehydrates the gas for delivery to a gathering pipeline. The following equipment will be present at the facility:

- One (1) 30kW (49 HP) Generator Engine (GEN-01)
- One (1) 18 kW (24 HP) or 23 kW (31 HP) Generator Engine (GEN-02)
- One (1) 25.0 million standard cubic feet per day (mmscfd) triethylene glycol (TEG) dehydrator (RSV-01)
- One (1) 0.75 million British Thermal Units per hour (MMBTU/hr) natural gas fired reboiler (RBV-01)
- One (1) 210 barrel (bbl) produced water storage tank (TK-01)
- Produced Water Truck Loadout (TLO) equipment
- Fugitive emissions (FUG) from process piping and equipment
- Startup/Shutdown/Maintenance (SSM) emissions

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-3189:

Generator Engine

Two (2) natural gas fired generator engines (GEN-01, GEN-02) will be utilized at the facility to provide power for various activities at the site.

Dehydrator

One (1) TEG dehydrator (RSV-01) will be utilized at the facility. The dehydrator removes water vapor from the inlet wet gas stream to meet pipeline specifications. In the dehydration process, the wet inlet gas stream flows through a contactor tower (absorber) where the gas is contacted with lean glycol. The lean glycol absorbs the water in the gas stream and becomes rich glycol laden with water and trace amounts of hydrocarbons. The rich glycol is then routed to a flash tank where the glycol pressure is reduced to liberate the lighter end hydrocarbons for use as fuel in the reboiler (RBV-01) ('recycle'). The rich glycol is then sent to the regenerator/still vent where the glycol is heated to drive off the water vapor and any remaining hydrocarbons. Once boiled, the glycol is returned to a lean state and used again in the process. The still vent emissions are controlled by a BTEX skid (condenser).

Produced Water Storage Tank

The 210 bbl produced water tank (TK-01) receives liquids from the dehydrator and inlet separator. Liquids removed through the dehydration process are cooled, condensed, and sent to the atmospheric storage tank. The inlet separator removes produced liquids (primarily water) and these liquids are also sent to the atmospheric storage tank.

Truck Loading

Loading of produced water into tanker trucks will produce small quantities of Volatile Organic Compounds (VOC) emissions from the displacement of vapors inside the tanker trucks.

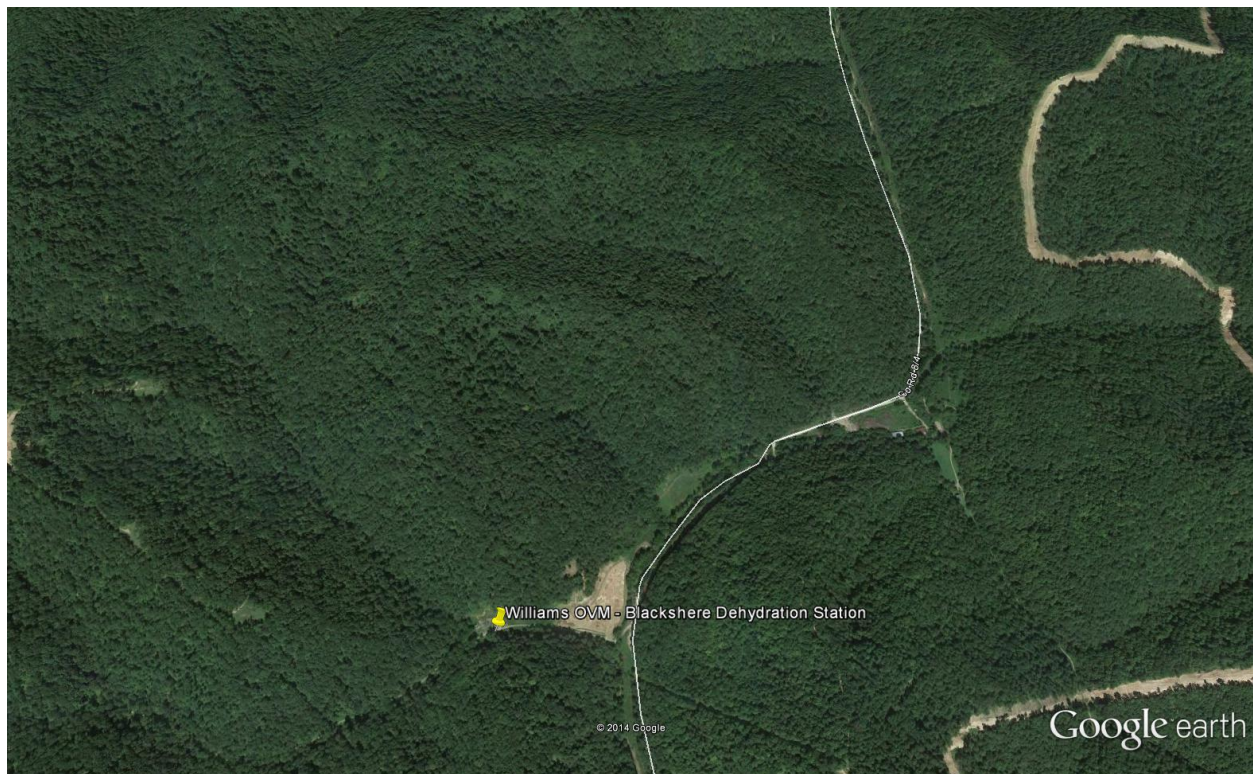
Fugitive Emissions

During routine operation of the facility there will be occasional leaks from process piping components such as valves, flanges, connectors, etc. Leaks from the process piping components result in VOC and HAP emissions to the atmosphere.

SITE INSPECTION

A site inspection was conducted on June 3, 2014 by Doug Hammell of the DAQ Enforcement Section. The proposed site was suitable for the facility. The closest residence was approximately 1,950 feet away.

Latitude: 39.4785
Longitude: -80.5945



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this construction application consist of the combustion emissions from two (2) natural gas fired generator engines (GEN-01, GEN-02), one TEG dehydrator reboiler (RBV-01), one (1) TEG dehydrator still vent (RSV-01), one (1) produced water storage tank (TK-01), one (1) truck loadout (TLO), and process piping fugitive emissions (FUG). Fugitive emissions for the facility are based on calculation methodologies presented in AP-42 and 40 CFR Part 98 greenhouse gas (GHG) emission factors. The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology
GEN-01	30 kW (49 HP) Generator Engine	Manufacturer's Data, EPA AP-42 Emission Factors
GEN-02	One (1) 18 kW (24 HP) or 23 kW (31 HP) Generator Engine (GEN-02)	Manufacturer's Data, EPA AP-42 Emission Factors
RBV-01	0.75 MMBtu/hr TEG Dehydrator Reboiler	EPA AP-42 Emission Factors
RSV-01	25.0 mmscfd TEG Dehydrator Still Vent (Recycled Emissions to Reboiler)	GRI-GlyCalc 4.0
TK01	210 bbl Produced Water Storage Tank	EPA-450/3-85-001a Emission Factors
TLO	Truck Loadout Rack	EPA AP-42 Emission Factors
FUG	Process Piping Fugitive Emissions	EPA AP-42, 40 CFR Part 98 Emission Factors

The following table indicates the control device efficiencies that are required for this facility:

Emission Unit	Pollutant	Control Device	Control Efficiency
25.0 mmscfd TEG Dehydrator Still Vent (RSV-01)	Volatile Organic Compounds	Recycled Reboiler / BTEX Skid (Condenser)	Varies by Pollutant
	Hazardous Air Pollutants		

The total facility PTE for the Blackshere Dehydration Station is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)
Nitrogen Oxides	1.62
Carbon Monoxide	14.29
Volatile Organic Compounds	35.66
Particulate Matter-10	0.06
Sulfur Dioxide	<0.01
Formaldehyde	0.04
Total HAPs	5.52
Carbon Dioxide Equivalent	4,362

Maximum detailed controlled point source emissions were calculated by Williams and checked for accuracy by the writer and are summarized in the table on the next page. In regards to greenhouse gases (GHG), the Carbon Dioxide Equivalent (CO₂e) emissions were based on EPA emission factors for the reboiler, SSM, and fugitive emissions.

Williams Ohio Valley Midstream, LLC – Blackshere Dehydration Station (R13-3189)

Emission	Source	NO _x		CO		VOC		PM10/2.5		SO ₂		Formaldehyde		Total HAPs		CO ₂ e
Point ID#		lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	ton/year
1E	Dehydrator Flash + Regen	-	-	-	-	7.52	32.96	-	-	-	-	-	-	1.16	5.08	3274
2E	Dehydrator Reboiler	0.08	0.36	0.07	0.30	<0.01	0.02	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	427
3E	Generator Engine	0.25	1.10	0.43	1.88	0.02	0.10	<0.01	0.03	<0.01	<0.01	0.01	0.04	0.01	0.05	234
4E	Generator Engine	0.32	0.16	24.21	12.10	0.32	0.16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	13
5E	Produced Water Storage Tank	-	-	-	-	0.04	0.24	-	-	-	-	-	-	0.02	0.09	15
6E	Produced Water Loadout	-	-	-	-	NA	0.55	-	-	-	-	-	-	NA	0.14	0
Total Point Source		0.65	1.62	24.71	14.29	7.91	34.02	0.02	0.06	<0.01	<0.01	0.01	0.04	1.20	5.37	3963

Fugitive	Process Piping Fugitives	0	0	0	0	0.37	1.64	0	0	0	0	0	0	0.04	0.16	397
Total Sitewide		0.65	1.62	24.71	14.29	8.28	35.66	0.02	0.06	<0.01	<0.01	0.01	0.04	1.24	5.53	4362

REGULATORY APPLICABILITY

The following rules apply to the facility:

45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45CSR2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the proposed reboiler (RBV-01) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR2.

Williams would also be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

45CSR4 (To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors)

45CSR4 states that an objectionable odor is an odor that is deemed objectionable when in the opinion of a duly authorized representative of the Air Pollution Control Commission (Division of Air Quality), based upon their investigations and complaints, such odor is objectionable. No odors have been deemed objectionable.

45CSR10 (To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides)

The purpose of 45CSR10 is to establish emission limitations for sulfur dioxide which are discharged from fuel burning units. 45CSR10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the proposed reboiler (RBV-01) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR10.

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that Williams exceeds the regulatory emission threshold for criteria pollutants of 6 lb/hr and 10 ton/year, and they are also subject to a substantive requirement of an emission control rule promulgated by the Secretary (40CFR60 Subpart JJJJ, 40CFR63 Subparts HH and ZZZZ).

Williams paid the appropriate application fee and published the required legal advertisement for a construction permit application.

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to this source by reference of 40CFR60, Subpart JJJJ. These requirements are discussed under that rule below.

45CSR22 (Air Quality Management Fee Program)

Williams is not subject to 45CSR30. The Blackshere Dehydration Station is subject to 40CFR60 Subpart JJJJ, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

Williams is required to pay the appropriate annual fees and keep their Certificate to Operate current.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE))

40CFR60 Subpart JJJJ establishes emission standards for applicable SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE.

The HC+NO_x standard is 3.8 g/kW-hr and the CO standard is 6.5 g/kW-hr. For natural gas-fueled engines, you are not required to measure nonmethane hydrocarbon emissions or total hydrocarbon emissions for testing to show that the engine meets the emission standards of 1048.101(c); that is, you may assume HC emissions are equal to zero.

The 30 kW Generator Engine (GEN) meets these standards.

The 24 HP natural gas fired Kubota DG972-E2 generator is subject to the emission standards of 60.4233(a). This requires the generator to meet 40 CFR part 1054 emission standards. The generator complies with the EPA Tier 2 regulations.

The 31 HP propane fired Kubota WG972 generator is subject to the emission standards of 60.4233(c). This requires the generator to meet the new nonroad SI requirements in 40 CFR part 1048. The generator complies with these standards.

40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants for Oil and Natural Gas Production Facilities)

Subpart HH establishes national emission limitations and operating limitations for HAPs emitted from oil and natural gas production facilities located at major and area sources of HAP emissions. The glycol dehydration unit at the Blackshere Dehydration Station is subject to the area source requirements for glycol dehydration units. However, because the facility is an area source of HAP emissions and the actual average benzene emissions from the glycol dehydration unit is below 0.90 megagram per year (1.0 tons/year) it is exempt from all requirements of Subpart HH except to maintain records of actual average flowrate of natural gas to demonstrate a continuous exemption status.

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The engines (GEN-01, GEN-02) at the Blackshere Dehydration Station are subject to the area source requirements for non-emergency spark ignition engines.

The applicability requirements for a new stationary RICE located at an area source of HAPs, is the requirement to meet the standards of 40CFR60 Subpart JJJJ. These requirements were outlined above. The proposed engine meets these standards.

Williams will be required to perform the applicable initial performance tests within 180 days from startup, and subsequent testing every 8,760 hours of operation or 3 years, whichever comes first.

The following rules do not apply to the facility:

45CSR30 (Requirements for Operating Permits)

Williams is not subject to 45CSR30. The Blackshere Dehydration Station is subject to 40CFR60 Subpart JJJJ, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

40CFR60 Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

This rule applies to steam generating units with a heat input capacity of 100 MMBTU/hr or less, but greater than or equal to 10 MMBTU/hr for which construction commenced after June 9, 1989. Williams does not have an applicable unit, therefore, Williams would not be subject to this rule.

40CFR60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels)

40CFR60 Subpart Kb does not apply to storage vessels with a capacity less than 75 cubic meters. The largest tank that Williams has proposed to install is 33.39 cubic meters each. Therefore, Williams would not be subject to this rule.

40CFR60 Subpart KKK (Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants)

40CFR60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984, and on or before August 23, 2011. The Blackshere Dehydration Station is not a natural gas processing facility, therefore, Williams is not subject to this rule.

40CFR60 Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution)

EPA published in the Federal Register new source performance standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. 40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO₂) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. The following affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this subpart:

- a. Each gas well affected facility, which is a single natural gas well.

There are no gas wells at this facility. Therefore, all requirements regarding gas well affected facilities under 40 CFR 60 Subpart OOOO would not apply.

- b. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your centrifugal compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are no centrifugal compressors at the Blackshere Dehydration Station. Therefore, all requirements regarding centrifugal compressors under 40 CFR 60 Subpart OOOO would not apply.

- c. Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your reciprocating compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

There are no reciprocating compressors at the Blackshere Dehydration Station. Therefore, all requirements regarding reciprocating compressors under 40 CFR 60 Subpart OOOO would not apply.

- d. Pneumatic Controllers

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh which commenced construction after August 23, 2011, and is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant.
- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller which commenced construction after August 23, 2011, and is located at a natural gas processing plant.

There will be no continuous bleed natural gas-driven pneumatic controllers at this facility. Therefore, all requirements regarding pneumatic controllers under 40 CFR 60 Subpart OOOO would not apply.

- e. Each storage vessel affected facility, which is a single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment.

40CFR60 Subpart OOOO defines a storage vessel as a unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to contain an accumulation of liquids or other materials. The following are not considered storage vessels:

- Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If the source does not keep or are not able to produce records, as required by §60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.
- Process vessels such as surge control vessels, bottoms receivers or knockout vessels.
- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

This rule requires that the permittee determine the VOC emission rate for each storage vessel affected facility utilizing a generally accepted model or calculation methodology within 30 days of startup, and minimize emissions to the extent practicable during the 30 day period using good engineering practices. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee must reduce VOC emissions by 95% or greater within 60 days of startup. The compliance date for applicable storage vessels is October 15, 2013.

The storage vessels located at the Blackshere Dehydration Station have a potential to emit of less than 6 tpy of VOC. Therefore, Williams is not required by this section to reduce VOC emissions by 95%.

- f. The group of all equipment, except compressors, within a process unit is an affected facility.
- Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
 - Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart if it is located at an onshore natural

gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart.

- The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

The Blackshere Dehydration Station is not a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants would not apply.

- g. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
- Each sweetening unit that processes natural gas is an affected facility; and
 - Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.
 - Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H₂S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in §60.5423(c) but are not required to comply with §§60.5405 through 60.5407 and paragraphs 60.5410(g) and 60.5415(g) of this subpart.
 - Sweetening facilities producing acid gas that is completely reinjected into oil-or-gas-bearing geologic strata or that is otherwise not released to the atmosphere are not subject to §§60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of this subpart.

There are no sweetening units at the Blackshere Dehydration Station. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.

45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants)

45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment)

The Blackshere Dehydration Facility is located in Wetzel County, which is an unclassified county for all criteria pollutants, therefore this site is not applicable to 45CSR19.

As shown in the following table, Williams is not a major source subject to 45CSR14 or 45CSR19 review. According to 45CSR14 Section 2.43.e, fugitive emissions are not included in the major source determination because it is not listed as one of the source categories in Table 1. Therefore, the fugitive emissions are not included in the PTE below.

As shown in the table below, Williams is not subject to 45CSR14 or 45CSR19 review.

Pollutant	PSD (45CSR14) Threshold (tpy)	NANSR (45CSR19) Threshold (tpy)	Blackshere PTE (tpy)	45CSR14 or 45CSR19 Review Required?
Carbon Monoxide	250	NA	14.29	No
Nitrogen Oxides	250	100	1.62	No
Sulfur Dioxide	250	100	<0.01	No
Particulate Matter 10	250	100	0.06	No
Ozone (VOC)	250	NA	34.02	No

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The following table lists each HAP's carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	Category B1 - Probable Human Carcinogen
Benzene	VOC	Yes	Category A - Known Human Carcinogen
Ethylbenzene	VOC	No	Inadequate Data
Toluene	VOC	No	Inadequate Data
Xylenes	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. For a complete discussion of the known health effects of each compound refer to the IRIS database located at www.epa.gov/iris.

AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source due to the fact that the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) or 45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment) as seen in the table listed in the Regulatory Discussion section under 45CSR14/45CSR19.

SOURCE AGGREGATION DETERMINATION

“Building, structure, facility, or installation” is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

- The Blackshere Dehydration Station will operate under SIC code 1389 (Oil and Gas Field Services, Not Classified Elsewhere). The upstream gas production wells will operate under SIC code 1311 (Crude Petroleum and Natural Gas). Therefore, both share the same two-digit major SIC code of 13. Therefore, the Blackshere Dehydration Station and upstream wells do belong to the same industrial grouping.
- Williams operates under their parent company, The Williams Companies, Inc. and is the sole operator of the Blackshere Dehydration Station. The production wells that send natural gas to the Blackshere Dehydration Station are owned and operated by other companies unaffiliated with Williams. Williams has no ownership stake in any production well that may send natural gas to the Blackshere Dehydration Station. Williams has no operational control over any equipment owned or operated by any natural gas producer upstream of the Blackshere Dehydration Station. All employees at the Blackshere Dehydration Station are under the exclusive direction of Williams and have no reporting authority to any other entity. In addition, no work forces are shared between the different companies. Contracts are in place for the Blackshere Dehydration Station to handle gas from the aforementioned wells. However, the Blackshere Dehydration Station will potentially receive gas from other producers in the future. Futuristically, Williams will not have ownership or control of future wellhead activities. The producers are and will be responsible for any decisions to produce or shut-in wellhead facilities and no control over the equipment installed, owned, and operated by Williams. Therefore, these facilities are not under common control.
- The Blackshere Dehydration Station is located in close proximity to a production well. However, this well is not under common control with Williams. The closest Williams facility to the Blackshere Dehydration Station is approximately 2 miles from the Blackshere Dehydration Station. Operations separated by these distances do not meet the common sense notion of a plant. Therefore, the properties in question are not considered to be on contiguous or adjacent property.

The Blackshere Dehydration Station and upstream wells share the same industrial grouping. However, the two (2) facilities are not under common control. Therefore, the emissions from these two (2) facilities should not be aggregated in determining major source or PSD status.

MONITORING OF OPERATIONS

Williams will be required to perform the following monitoring and recordkeeping:

- Complete an extended gas analysis of the inlet gas once every twelve (12) months.
- Monitor and record quantity of natural gas consumed and hours of operation for all combustion sources.
- Monitor and record quantity of produced water transferred from the storage tank.
- Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engine and ancillary equipment.
- Maintain records of all applicable requirements of 40CFR60 Subpart JJJJ, and 40CFR63 Subparts HH and ZZZZ.
- The records shall be maintained on site or in a readily available off-site location maintained by Williams for a period of five (5) years.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that Williams meets all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Blackshere Dehydration Station should be granted a 45CSR13 construction permit for their facility.

Jerry Williams, P.E.
Engineer

Date